LCUG SERVICE QUALITY MEASUREMENTS (SQMs)

UNBUNDLED ELEMENTS

| Function to Be Measured | Sub-Function To Be Measured | Objective of Metric | Proposed SQM | |
|----------------------------------|--------------------------------|---|--|--|
| Availability of Network Elements | | Measures the availability of network elements (e.g. signaling link transport, SCPs/Databases & loop combinations) | Loop Combo availability 100% Signaling Link Transport Availability: A-Link:≤ 1 min per year D-Link:≤ 1 sec per year SCPs/Databases: ≤15 min per year SCPs/Databases correctly updated: ≥ 99% in 24 hrs | |
| Performance of Network Elements | | Measures the performance of network elements (e.g., LIDB, routing to CLEC OS/DA platforms) | LIDB performance: LIDB reply rate to all query attempts ≥ 99.95% LIDB query time-out≤ 0.05% Unexpected data values in replies for all LIDB queries ≤ 1% % if LIDB queries return a missing customer record = 0% Group troubles in all LIDB queries ≤ 0.5% Delivery to OS platform: Mean Post Dial Delay for "0" calls from LSO to CLEC OS platform ≤ 2 seconds PDD for "0+" calls with 6 digit analysis from LSO to CLEC OS platform: 95% ≤ 2.0 sec; Mean ≤ 1.75 sec Call attempts to CLEC OS Platform blocked ≤ 0.1% | |

LCUG SERVICE QUALITY MEASUREMENTS (SQMs)

SYSTEM

| Function to | | Sub-Function To Be | 211 11 222 11 | | |
|-------------------------|-------|-------------------------------|----------------------------------|-------------------------------|---|
| Measured | | Measured | Objective of Metric | Proposed SQM | _ |
| Support Systems Availab | ility | Pre-Order Systems | Measures the availability of the | 99.9 % Availability per month | l |
| | | Ordering/Provisioning Systems | operations support systems and | | ĺ |
| 1 | | Maintenance/Repair Systems | subsystems | | l |

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

| In the Matter of the Petition for A | Arbitr | atio | on) | | |
|-------------------------------------|--------|------|-----------|--------------|--------|
| of an Interconnection Agreement Bet | ween |) | DOCKET NO | . UT-960338 | |
| |) | | | | |
| MCIMETRO ACCESS TRANSMISSION | |) | | | |
| SERVICES, INC. and | | |) | ARBITRATOR'S | REPORT |
| GTE NORTHWEST INCORPORATED |) | AND | DECISION | | |
| |) | | | | |
| Pursuant to 47 USC Section 252. | | |) | | |
| | | | | | |

I. INTRODUCTION

A. Procedural History

On April 3, 1996, MCIMETRO Access Transmission Services, Inc. ("MCI") requested negotiations with GTE Northwest Incorporated ("GTE") for interconnection under the terms of the Telecommunications Act of 1996, Public Law No. 104-104, 101 Stat. 56, codified at 47 USC y 151 et seq. (1996) ("the Act" or "1996 Act").

On September 10, 1996, MCI timely filed with the Washington Utilities and Transportation Commission ("Commission") and served on GTE a request for arbitration pursuant to 47 USC y 252(b)(1). The matter was designated Docket No. UT-9603338. On October 2, 1996, the Commission entered an Order on Arbitration Procedure establishing certain procedural requirements and on October 9, 1996, the Commission entered an Order appointing the undersigned as arbitrator. GTE timely filed its response to the petition.

A hearing was held before the arbitrator on December 3 and 4, 1996, in the Commission's main hearing room in Olympia, Washington. MCI was represented by Brooks Harlow and Robert Nichols, attorneys at law. GTE was represented by Timothy O'Connell, John B. Williams, and Michael Hill, attorneys at law. Following the hearing, the parties filed final briefs and final or "last best offers" on December 19, 1996 (see following section).

B. The Arbitration Process

In the parlance of judicial administration, this arbitration has proceeded on what has been appropriately dubbed a "rocket docket". The mandated timeline within which to complete this arbitration in compliance with the Act has tested both the

patience and the skills of attorneys, witnesses, and Commission Staff. Furthermore, the parties have conducted in excess of 30 arbitrations on a nationwide basis contemporaneous with this proceeding, and numerous of those arbitrations were between these same parties. Under these circumstances, these attorneys and witnesses

between these same parties. Under these circumstances, these attorneys and witnesses have earned the respect of this arbitrator by maintaining the highest standards of professional conduct and civility towards each other throughout the proceeding.

The transformation initiated by the Telecommunications Act of 1996 is unprecedented, and the range and complexity of issues present many matters of first impression. This process began in the federal legislature, policies for implementation were developed by the executive branch, and state commissions were delegated the role of resolving disputes between the parties and approving operative agreements.

C. Standards for Arbitration

The Telecommunications Act states that in resolving by arbitration any open issues and imposing conditions upon the parties to the agreement, the state commission is to: (1) ensure that the resolution and conditions meet the requirements of section 251, including the regulations prescribed by the FCC under section 251; (2) establish rates for interconnection services, or network elements according to section 252(d); and (3) provide a schedule for implementation of the terms and conditions by the parties to the agreement. 47 USC § 252(c).

D. Final Offer Arbitration

"Final offer" (or "best and final offer") arbitration was adopted for this arbitration. In preparing the arbitration report in this matter, the arbitrator will select between the parties' last proposals as to each unresolved issue, selecting the proposal which is most consistent with the requirements of state and federal law and Commission policy. The arbitrator will choose either an entire proposal, or choose between parties' proposals on an issue-by-issue basis. In the event that neither proposal is consistent with law or Commission policy, the arbitrator will render a determination in keeping with those requirements.

E. Presentation of Resolved and Unresolved Issues

The parties resolved a number of issues in this proceeding. The issues were presented in a number of formats.

The Matrix

The parties presented a joint issues statement entitled Matrix of Issues and Positions of MCI and GTE ("matrix"). The final version of this matrix was presented on December 19, 1996. The matrix lists unresolved issues. The matrix was used by the arbitrator as the reference for the parties' positions, with additional reference made to other materials listed below and to the briefs. This decision refers to issues by the numbers shown on the matrix. In many cases, the statement of a party's position is taken from the matrix.

Final Offer of GTE

GTE filed a post-hearing brief and final offer contract language in a

GTE filed a post-hearing brief and final offer contract language in a document titled "Interconnection, Resale, and Unbundling Agreement Between GTE Incorporated and MCIMETRO ." ("GTE Final Offer Contract").

Final Offer of MCI

MCI filed a post-hearing brief and final offer contract language in a document titled "MCIMETRO Washington Contract Comparison". ("MCI Final Offer Contract").

Contract Language Issue

As a general matter, this decision is limited to the disputed issues presented for arbitration. 47 USC y 252(b)(4). In addition, except where specified, this decision resolves the issues presented, rather than focusing on particular contract

language. However, it should be recognized that disagreements over specific contract language are susceptible to being framed as unresolved issues. Adoption of one party's position generally implies that the parties should use that party's contract language incorporating the advocated position in preparing a final agreement. The arbitrator will review requests to choose between alternative proposed contract language on an issue-by-issue basis. Contract langua 47 USC V 252(e).

F. Generic Pricing Proceeding

On October 23, 1996, the Commission entered an order in this and other arbitration dockets declaring that a generic proceeding would be initiated in order to review costing and pricing issues for interconnection, unbundled network elements, transport and termination and resale. The Commission stated that rates adopted in the pending arbitrations would be interim rates, pending the completion of the generic proceeding. The proceeding has been initiated and set for prehearing conference. Accordingly, the price proposals made in this arbitration have been reviewed with the goal of determining which offers a more reasonable interim rate. The conclusions of the arbitrator with respect to price proposals and supporting information are made in this context and do not necessarily indicate Commission approval or rejection of cost and price proposals for purposes of the generic case.

G. The Eighth Circuit Order and the FCC Rules

As the parties are aware, the FCC rules implementing the local competition provisions of the Act have been appealed and those rules relating to costing and pricing have been stayed by the United States Court of Appeals for the Eighth Circuit. The provisions of the FCC order and rules not subject to stay are adhered to in this report. Those provisions which are subject to stay do not require compliance pending resolution of the underlying appeal. The arbitrator is free, therefore, to disregard those specific federal requirements. The stay does not preclude reference, however, to underlying rationale and analysis contained in the federal order for whatever value it may have on its merits.

H. GTE's Constitutional Taking Issue

GTE has previously stated an objection on the record that the arbitrator's decisions on the numerous issues submitted for resolution may constitute an unconstitutional taking. GTE presented legal arguments in its post-arbitration Brief addressing this contention. The arbitrator has not considered these legal arguments in the course of resolving the disputed issues. Any claims that an unconstitutional taking has occurred may be duly presented for consideration at some later date to be determined by GTE.

I. GTE's Constitutional Due Process Issue

Pursuant to the Order on Arbitration Procedure entered by the Commission in this docket on October 2, 1996, the arbitration proceeding was restricted to two days of hearings. GTE claims that this restriction deprived it of a full opportunity to question witnesses or fully present its case. In these proceeding, it was essential to reasonably limit the length of the hearing process in order to meet the statutory deadlines set forth in the Act. Any claims that GTE has been deprived of its constitutional right to due process may be duly presented for consideration at some later date to be determined by GTE.

J. All Issues Addressed In This Proceeding Were Properly Raised

GTE has claimed that the following issues were not properly raised in MCI's Petition for Arbitration: Issue Nos. 68 (in part), 58, 40, and 85. On June 28, 1996 this Commission issued an "Interpretive and Policy Statement Regarding Negotiation, Mediation, Arbitration, and Approval of Agreements under the Telecommunications Act of 1996" ("Interpretive Statement") under Docket No. UT-960269. Paragraph 5 of the Interpretive Statement states that a petition for arbitration shall be accompanied by all relevant documentation concerning the unresolved issues, including the position of each party with respect to those issues. Relevant documentation expressly includes a proposed interconnection agreement.

MCI attached its proposed Interconnection Agreement as Exhibit C to its Petition. Furthermore, MCI attached a matrix of unresolved issues and preliminary positions of the parties to its Petition. See Petition, Exhibit D. GTE objects to the submission of these issues on the basis that they are not set forth in Exhibit D. The Post-Arbitration Brief of MCI sets forth specific references where each issue is generally and specifically addressed. See Post-Arbitration Brief, p.140-41. The arbitrator finds that the disputed issues were sufficiently identified in MCI's Petition and they are included in this report,

K. Stipulations Between The Parties

Fifteen separate stipulations have been entered into between the parties and collectively been admitted into the record as GTE Exhibit 22. See Appendix A. These stipulations originally arose out of an arbitration proceeding in Texas; however,

MCI confirmed at the hearing that the stipulations constitute agreements in principle in the State of Washington. (Tr., p.114-15). At the time the arbitrator notified the parties that if they were unable to work out mutually agreeable specific contract language, then

that if they were unable to work out mutually agreeable specific contract language, then the arbitrator would regard the issues as if there were no agreement in principle.

Subsequent to the submission of briefs and best final offers the arbitrator requested clarification from the parties as to whether or not these stipulations resolved issues which otherwise were being presented for a determination. GTE relies on these stipulations as if they were its position on all issues for which they are cited. MCI acknowledged that there was some inconsistency between the stipulations and the contract language in its best final offer. MCI stated that in those instances where the language of the stipulations was inconsistent with the language of the best final offer, the language of the stipulation would control. In those instances where the language of the stipulations was consistent but different from the language of the best final offer, the language of the best final offer would control. The arbitrator has resolved relevant issues on the basis of these positions of the parties.

II. RESOLUTION OF DISPUTED ISSUES

A. COSTING METHODS AND PRICING (Issue Nos. 1-7)

ISSUE NO. 1: Calculation Of Cost And Pricing Of Unbundled Network Elements.

Statement of Issue. How should the cost of interconnection and unbundled network elements be calculated, and what prices should be established?

GTE Position. In determining the appropriate prices for interconnection and unbundled network elements, GTE states that the arbitrator must interpret the Telecommunications Act of 1996 to provide for the recovery of all of GTE's historic and forward-looking costs, plus a reasonable profit.

GTE states that, at a minimum, it must be able to recover all of its costs:

- Incremental Costs.
- All Forward-Looking Joint and Common Costs. GTE must be allowed to recover all of its forward-looking joint and common costs, and not just a portion of those costs.
- Opportunity Costs. GTE alleges current rates contain a subsidy, or "contribution," which compensates GTE for its obligation of providing below-cost services. ILEC's such as GTE bear certain burdens -- including rate structures that reflect cross subsidies from universal service and carrier of last resort obligations. If new entrants are allowed to supply the higher priced vertical and toll services that are now used to subsidize below cost services, GTE should be entitled to recover its lost opportunity costs.
- Costs of Unbundling. Any price established under the Act must include any new or additional costs incurred to accomplish the tasks of unbundling.

GTE states that its economic framework, M-ECPR ("Market constrained - Efficient Competition Pricing Rule"), bases prices upon forward-looking costs, promotes competition and, when combined with a competitively neutral end-user charge, satisfies the Act's requirement that the ILEC be allowed to earn "a reasonable profit." GTE argues that in order to compensate for costs that cannot be recovered through TELRIC methodologies, the Commission must establish a competitively neutral, nonbypassable end-user charge, and that without some sort of end-user charge, facilities-based competition and M-ECPR pricing of unbundled network elements will produce stranded costs which deprives GTE of its full cost recovery as required by the Act.

GTE also contends that it is the only party in this arbitration that has presented cost studies based on the costs that GTE will incur in providing local telephone service in the future; therefore, the Commission cannot consider other cost studies.

MCI Rebuttal. MCI characterizes GTE's M-ECPR model as conflicting with basic rules for cost studies as laid out by this Commission and the FCC. Most notably, the M-ECPR ensures that GTE will recover its embedded costs which MCI excludes from any forward-looking methodology.

The M-ECPR is also criticized for guaranteeing GTE against suffering any competitive losses by including "lost opportunity" costs in the cost of unbundled elements.

Finally, MCI distinguishes GTE prices as being based on a model which is proprietary, designed only for its own use, and which is not open and subject to verification.

MCI Position. In its Closing Brief, MCI makes reference to several proceedings wherein this Commission has adopted standards for costing and pricing network elements which are relevant to this proceeding. MCI cites the Fourth Supplemental Order in the Interconnection Proceeding in particular regarding the application of several basic criteria to pricing/costing issues:

- Rates and conditions should reflect costs and be fair, just, reasonable and sufficient.
- New entrants should be treated as "co-carriers" and the Commission "should dismantle any remaining barriers to entry and avoid constructing (or authorizing incumbents to construct) any new barriers through decisions on interconnection issues".
- There should be "open access to the company's cost methodology, input data, assumptions, and cost modeling" so that they would be "auditable, 'checkable'".
- The appropriate measure of cost is Total Service Long-Run Incremental Cost.

MCI's proposed interim rates for interconnection and unbundled network elements are based on Version 2.2.2 of the Hatfield Model of estimating costs. The Hatfield Model is a computerized, engineering-based cost proxy model developed to estimate forward-looking, long-run incremental costs of building the incumbent's network using least cost technology and the existing wire centers of the ILEC. MCI states that because the model is publicly available, and its inputs can be varied by the user, it is possible to directly evaluate the model for accuracy, and to ascertain the sensitivity of the model to changes in the various inputs. MCI also states that the model uses a series of Washington specific data as input: census and geographical data, population by Census Block Group (CBG), business employee data, Washington GTE ARMIS data, GTE wire center data, line counts and traffic data.

The Hatfield Model is based upon "hypothetical" as opposed to "actual costs"; however, MCI contends that this distinction is not relevant insofar as this Commission requires that the parties develop forward-looking costs. The Hatfield Model is intended to be a snapshot because it is a simpler approach and MCI believes that the costs to build a dynamic model do not justify the likely results. The Hatfiled Model does not allow GTE to recover its embedded costs. MCI states that this is consistent with the principles enunciated by this Commission and the FCC.

With regards to common costs, the model allocates approximately 10% of common costs based on an analysis of ARMIS data. MCI contends that if the add-on for common costs was to be any higher than it is, that percentage would add costs which have already been disaggregated and attributed to those unbundled elements which share the cost.

GTE Rebuttal. GTE refers to the FCC Order in support of its position that forward-looking costs should represent "the incremental costs incumbents actually expect to incur." GTE contends that because all of its incremental costs must be recovered, TELRIC must be calculated upon GTE's actual network architecture, and not upon the Hatfield hypothetical network. Contrary to Hatfield's claim, the Model is anything but "user friendly." GTE states that it contains a large number of necessary input values which do not mesh with GTE's data, and that it is impossible to determine how the Hatfield Model defines other inputs.

GTE states that the Hatfield Model itself is really not a computer model at all, but instead is an EXCEL spreadsheet that consists of over 2,705,000 million cells utilized in the model's calculations. Its principal architect, Dr. Robert Mercer, is not an economist. He is not trained in the art of costing methodology. Both he and the other principal developer, Mr. Chandler, are engineers. As an empirical matter, GTE points out that the Model has never before been used to price interconnection and unbundled network elements. In general, GTE's position is that the Hatfield Model has never been verified through comparison to real world phenomena, and that it should be rejected on that basis alone.

GTE states that many of the inputs for the Hatfield Model are arbitrarily based upon "estimates" and "assumptions," and that many of the assumptions used in the Model are biased in favor of lower prices. According to GTE, the Model by its nature

the Model are blased in favor of lower prices. According to GTE, the Model by its nature is selective it assumes a competitive environment when it will reduce costs, but refuses to account for competition when that assumption would cause costs to rise.

GTE also contends that numerous assumptions that are Hatfield Model default values are flawed. The more critical of these are:

- The Hatfield Model assumes fill factors that are too high. Fill factors relate to the spare capacity of a telephone network. The higher the fill factor, the less spare capacity encompassed in the telephone system.
- The Hatfield Model assumes that the telephone system will share all distribution structures equally with two other utilities, and, as such, will only incur one-third of the costs assigned to each distribution and feeder structure.
- The variable overhead factor used by the Hatfield Model is 10%. The 10% assumption in the Hatfield Model is not based upon any empirical estimate or analysis of GTE's joint and common costs. GTE's studies calculated that a reasonable allocation would be significantly higher.
- It uses heavily discounted prices for new switches and assumes that the telephone company would instantly install all its switching at costs that are substantially lower than actual forward-looking costs.
- Competition will cause the cost of capital to increase, and could do so markedly. The currently prescribed FCC figure is 11.25%. Hatfield's assumption that the cost of capital will be 10.01% clearly does not recognize competition.
- Competition breeds innovation and innovation leads to shorter depreciation lives. The Hatfield Model, however, assumes a depreciation schedule approved in the noncompetitive/regulated environment.

Arbitrator's Decision. The arbitrator adopts the MCI proposed prices for unbundled network elements developed using the Hatfield Model Version 2.2.2, including a loop price of \$13.92. Appendix B sets forth the prices for various unbundled network elements developed by MCI using the Hatfield Model Version 2.2.2. In the event that MCI does not propose a rate, or that the Hatfield Model Version 2.2.2 was not the basis for the rate, then the prices based upon the TELRIC methodology as employed by GTE are adopted. Furthermore, since it is not clear that all nonrecurring charges are properly included in MCI's pricing proposal, GTE's proposed nonrecurring charges are adopted. MCI's proposal for the deaveraging of prices is rejected.

Discussion. This is "final offer" arbitration. The two offers presented differ dramatically. The arbitrator's task is not to "split the difference" but to select the offer which most closely complies with the requirements of the federal Act, any

offer which most closely complies with the requirements of the federal Act, any applicable FCC requirements, and with this Commission's orders. The rate adopted here, following Commission approval of the interconnection agreement, will remain in effect pending the outcome of the Commission's generic pricing proceeding.

The provisions of the 1996 Act relevant to the determination of the loop pricing issue are contained in section 252(d). Section 252(d)(1) provides that rates shall be just and reasonable and shall be:

- "(I) based on the cost (determined without reference to a rate-of-return or other rate based proceeding) of providing the interconnection or network element (whichever is applicable), and
- (ii) nondiscriminatory, and
- (iii) may include a reasonable profit."

The Commission has already expressed its general approval of the Hatfield model as a means of estimating loop costs in Washington Utilities and Transportation Commission v. U S WEST Communications, Inc., Docket No. UT-950200, Fifteenth Supplemental Order (April regarding loop cost in that rate case were based on Version 2.2.1 of the Hatfield Model. The revised Hatfield study filed in this proceeding has several desirable attributes. It includes all network elements, estimates costs for both exchange services and individual network elements based on TSLRIC principles, and performs a detailed cost breakout.

It is publicly available, a significant advantage for any model.

Significantly, the revised Hatfield study uses cost inputs which are more nearly consistent with those found by the Commission to be appropriate. Cost of money, fill factors, and depreciation rates are in line with those which the Commission has previously determined are reasonable. GTE does not use a consistent cost of capital; GTE does not employ an objective fill factor; and the economic lives used in running the Hatfield Model for GTE-Washington are the most recent FCC-approved depreciation data for GTE-WA.

GTE's position is based on the premise that its TELRIC study complies with the Act, with FCC requirements, and is otherwise a reliable basis for setting prices. The record, however, indicates some serious concerns about the GTE approach which make the resulting loop prices comparatively less acceptable as interim rates.

First, the notion of recovering embedded costs through an end-user charge is generally inconsistent with forward-looking cost methodology, which requires that forward-looking shared costs be directly attributable to a particular element or set of elements. Secondly, the inclusion of an opportunity cost as proposed by GTE is a

private opportunity cost that would be in GTE's corporate interests, but are not relevant for determining social opportunity costs, which are the costs of the resources consumed in producing unbundled network elements. GTE's argument that there is no distinction between social and private opportunity costs is rejected. Social and private opportunity

between social and private opportunity costs is rejected. Social and private opportunity costs are distinguishable on the basis of externalities, such as the local calling area externality.

It is not clear from this record that these factors will prevent GTE from recovering all of its costs in the post-Act environment. In addition to this Commission's generic pricing proceeding, there is a federal universal service proceeding and an access charge reform proceeding under way, all of which will influence GTE's ability to recover its historic costs.

The fundamental test of any cost study is the integrity of the assumptions, calculations and input values used to develop the ultimate outputs. The only method to test the reliability of the final product is to ensure that all of the data as well as the methodology are accessible for independent scrutiny and evaluation. While the Hatfield model is not perfect, and MCI inputs may require refinement, the MCI proposal is the more reliable, just and reasonable for the establishment of interim rates in this arbitration. 47 USC y 252(d)(1).

Geographic deaveraging is not expressly required by the federal Act. The requirement contained in the FCC rules, 47 CFR y 51.507 (f), is currently stayed by the Eighth Circuit Order. Geographic deaveraging of unbundled loop rates is inconsistent with the Commission's decision against adopting retail rate deaveraging in the most recent USWC rate case. There has not been a recent GTE rate case to reference.

ISSUE NO. 2: Bill And Keep, Transport, Termination

Statement of Issue. What rates are appropriate for transport and termination of local traffic?

GTE Position. Rates should not be symmetrical. Rather, rates should be based on each entity's own costs. GTE proposes use of its interstate access rates.

MCI Position. MCI states that a bill and keep arrangement for termination and transport is an appropriate methodology for the short term. MCI further states that in the long term, bill and keep is only appropriate for termination, but that a symmetrical cost-based rate should apply for transport on a per-minute of use basis.

Arbitrator's Decision. The agreement between the parties shall provide that bill and keep arrangements shall be utilized for the transport and termination of local traffic.

Discussion. The federal Act provides that each telecommunications carrier has the "duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications." 47 USC y 251(b)(5). The federal Act also provides that reciprocal compensation arrangements must "provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the facilities of the other carrier." 47 USC y 252(d)(2)(A)(I). The Act expressly does not preclude "arrangements that waive mutual recovery (such as bill-and-keep arrangements)[.]" 47

"arrangements that waive mutual recovery (such as bill-and-keep arrangements)[.]" 47 USC y 252(d)(2)(B)(I).

While the FCC order concluded that transport and termination should be treated as two distinct functions (FCC Interconnection Order, \$\forall 1039\$), the arbitrator does not find a sufficient basis to order that a "symmetrical cost-based rate should apply for transport on a per-minute of use basis" as requested by MCI. It would not be equitable to allow MCI to unilaterally designate an interconnection point and then impose the expense of transport on GTE. The reference to symmetry in this context is illusory. There is no evidence in the record that a cost-based rate on a per-minute of use basis satisfies the requirement of section 252(d)(2) that costs be determined "on the basis of the reasonable approximation of the additional costs of terminating such calls." Furthermore, there is insufficient evidence in the record to conclude that technologies employed by MCI perform functions similar to those performed by an ILEC's tandem switch. See FCC Interconnection Order, \$\forall 1090\$.

The FCC order provides that states may adopt a presumption that traffic is in balance as a basis for approving bill and keep. FCC Interconnection Order, y 1113. The burden is then on GTE to rebut the presumption. GTE has not offered evidence in the proceeding sufficient to rebut a presumption of traffic balance.

The Commission has adopted bill and keep as the appropriate interim method of reciprocal compensation for transport and termination. WUTC Interconnection Order, Docket No. UT-941464, et.al., pp. 29-30. The order expressed a preference for a capacity-charge method of compensation rather than minutes-of-use. MCI's proposal is consistent with the Commission's Interconnection Order to the extent that it provides for mutual recovery of cost through offsetting of mutual obligations, pursuant to 47 USC y 252(d)(2).

ISSUE NO. 3: Bill And Keep, Transport, Termination

Statement of Issue. Should bill-and-keep be used as a reciprocal compensation arrangement for transport and termination of local traffic on a temporary or permanent basis?

GTE Position. GTE should not be required to use a bill-and-keep arrangement, either initially or permanently. However, GTE would be willing to discuss with MCI a method to assume that traffic is in balance in order to apply bill-and-keep initially. If and when traffic is out of balance, bill-and-keep is not appropriate. GTE proposes that bill-and-keep systems be used unless traffic is more than 10% out of balance.

MCI Position. MCI states that a bill and keep arrangement for termination and transport is an appropriate methodology for the short term. MCI further states that in the long term, bill and keep is only appropriate for termination, but that a symmetrical cost-based rate should apply for transport on a per-minute of use basis.

Arbitrator's Decision. The bill and keep term is adopted on an interim basis. A 10% threshold for the difference between the traffic flows in two directions as proposed by GTE is adopted. Long term rates for transport and termination shall be determined in Docket UT-960369 ("Generic Costing and Pricing Docket").

Discussion. The arbitrator's decision is consistent with the FCC order. FCC Interconnection Order, y 1113.

ISSUE NO. 4: Pricing of Interim Number Portability

Statement of Issue. What method should be used to price interim number portability?

GTE Position. GTE should recover its total costs for providing interim number portability. New entrants can allocate or recover their costs as they choose. GTE's costs for interim number portability should be determined based on the network in place today, and allowing for capital, transport and termination, and opportunity and investment costs. The specific rates presented by GTE should be adopted.

MCI Position. Interim number portability should be priced according to FCC pricing principles to ensure that costs are allocated on a competitively neutral basis. MCI advocates use of bill and keep.

Arbitrator's Decision. Neither position of the parties is adopted; GTE should provide interim number portability pursuant to its Washington tariff for that service.

Discussion. The Commission's preferred outcome is to provide number portability at the incumbent's TSLRIC until a true number portability position is implemented. That is the purpose of the Washington tariff which should apply.

ISSUE NO. 5: Pricing Collocation

Statement of Issue. What method should be used to price collocation?

GTE Position. Collocation rates should allow for recovery of all costs, as required by the Act. GTE's proposed prices reflect this requirement.

MCI Position. Collocation rates should be set at TELRIC.

Arbitrator's Decision. The arbitrator adopts GTE's position regarding the pricing of physical collocation. Virtual collocation rates should be set in accord with GTE's federal virtual collocation tariff.

Discussion. FCC Interconnection Order, y 629 requires that incumbent LECs provide physical collocation on "rates, terms, and conditions that are just, reasonable, and nondiscriminatory," which is identical to the standard for interconnection

reasonable, and nondiscriminatory," which is identical to the standard for interconnection and unbundled elements in sections 251(c)(2) and (c)(3). The FCC concluded that a single set of pricing rules for interconnection, unbundled network elements, and collocation provides greater consistency and guidance to the industry, regulators, and the courts.

ISSUE NO. 6: Pricing Access To Poles, Ducts, Conduits, and Rights-of-Way

Statement of Issue. What is the proper methodology for calculating charges for access to poles, ducts, conduits and rights-of-way?

GTE Position. If a state (or GTE's tariff) regulates these kinds of attachments, then the state regulations (or tariff) should apply. GTE notes that the FCC has not yet promulgated rules on this subject. GTE recommends that any rate for attachments be imposed subject to a "true-up" once lawful rates are established.

MCI Position. Prices must be set at TELRIC, be nondiscriminatory, and be imputed into GTE's own local service rates. Prices for pathway facilities should be effective for the term of the Interconnection Agreement.

Arbitrator's Decision. The applicable state or, if none, federal tariff shall govern.

ISSUE NO. 7: Pricing Access To Operations Support Systems (OSS)

Statement of Issue. How should the cost of access to OSS be recovered?

GTE Position. MCI should pay the cost of access to OSS, because MCI is the cost-causer. GTE should not be compelled to pay for OSS access changes made to accommodate MCI.

MCI Position. The costs associated with OSS interfaces should be recovered on a competitively neutral basis. GTE should demonstrate exactly which costs are recovered by each nonrecurring charge (NRC) they propose and those costs should be demonstrated to be TELRIC costs.

Arbitrator's Decision. The cost of access to OSS should be recovered on the basis of TELRIC and should be calculated consistent with the methodology used to calculate unbundled network elements.

Discussion. The FCC concluded that operations support systems and the information they contain fall squarely within the definition of "network element" and must be unbundled upon request under section 251(c)(3). See FCC Interconnection Order, y 516. As such, the pricing of access to OSS should be determined on a forward-looking economic basis.

B. RESALE (Issue Nos. 8-27)

ISSUE NO. 8: Pricing Resold Services

Statement of Issue. What is the proper methodology for determining the prices for GTE resold services?

GTE Position. GTE states that its Avoided Cost Study complies with the requirements of the Act and establishes costs "that will be avoided" in a wholesale environment, and that it complies with section 252(d)(3) of the Act in that it identifies the "marketing, billing, collection, and other costs that will be avoided by the local exchange carrier."

According to GTE, it analyzed the costs associated with displaced retail activities, as well as the added costs of providing wholesale services. As to the first element, GTE analyzed its operations, including all of its existing work centers, to determine which activities or functions in each work center would be avoided in a wholesale environment and which would be unaffected. The total costs for affected activities ("affected costs") were determined from the books and records of each work center using GTE's 1995 cost data. The affected costs for each of these services was calculated on a national basis. GTE states that most of the costs that would be avoided are incurred on a national basis. GTE will continue to offer retail, as well as wholesale services.

As to the second element, GTE expects that it will incur additional costs in satisfying MCI's requests that GTE provide it with functionalities and capabilities which are not presently provided to GTE's retail customers. GTE currently has wholesale relationships with other communications carriers. GTE computed increased costs by identifying existing wholesale services that it deemed to be similar in nature to those in each of the retail service categories. These accounts were used as a proxy to compute the costs of substituted wholesale activities. Avoided costs were then calculated by taking affected retail costs and subtracting from it substitute resale costs.

GTE contends that separate discounts should be applied separately by this arbitrator to the respective service elements; a composite figure should not be used as a substitute for this precision. For comparative purposes, the GTE study produced a composite discount of 7%.

In response to, and in accordance with, the now-stayed FCC Order, GTE conducted as an alternative measure a Modified Avoided Cost Study. This study is an ARMIS-based model. GTE intended this study to be used only if the FCC's rules were held to be lawful. GTE's analysis was based upon the same work center cost detail used in its Avoided Cost Study. GTE then calculated individual avoided discount rates for the six direct expense accounts to be applied to the ARMIS model. GTE contends that this proof rebutted the discount factors assumed by the FCC for its avoided discount rates. This study produced an avoided cost discount rate of 10.30%.

MCI Rebuttal. MCI states that it is inappropriate for GTE to employ national data rather than GTE Washington specific data. MCI also states the following

national data rather than GTE Washington specific data. MCI also states the following shortcomings of the GTE methodology:

- GTE used a series of allocations based upon surrogate allocators like revenues time surveys which are performed by GTE personnel without written guidelines or verifiable procedures to estimate costs not avoided. Thus, the results are unverifiable.

- GTE adds wholesale costs using an unverifiable process which looks to access service data, not data regarding the retail services subject to resale.
- GTE includes losses from competition by way of opportunity costs contrary to the Act, the FCC, and Commission policy.
- When GTE identifies a cost category which contains costs which it cannot avoid, it adds the entire category of costs back in without justification.
- The GTE model does not employ a consistent "top-down" approach.
- GTE uses revenues to divide expenses rather than the MCI approach which properly uses expenses divided by expenses.

MCI Position. MCI proposes that wholesale rates be set at a 16.63% discount from retail rates. MCI applies this rate to all retail services in accordance with the provisions of the FCC Order. MCI states that this approach avoids unnecessary levels of subjectivity incurred by attempts to calculate a different discount per service.

MCI also states that its Avoided Cost Study treats the direct costs of providing retail services as fully avoidable and indirect costs as partially avoidable in the proportion of direct retail expenses to total expenses. Additionally, MCI's model accounts for additional costs that GTE will incur as a result of making sales at wholesale by reducing avoided costs in certain directly avoided categories from 100% to 90%.

GTE Rebuttal. GTE argues MCI's proposed discount is based on MCI assumptions that are not supported by the requirements of the Act, or the evidence in the record:

- First, MCI's proposal is based on the FCC methodology set forth in its First Report and Order. MCI has provided no backup analysis or study to support these calculations, and has relied solely on the FCC Order. However, the pricing provisions of that Order have now been stayed and are no longer in effect. There is therefore, a complete failure of proof in the record on MCI's part.
- Second, MCI's discount is based on GTE's theoretical "avoidable" costs rather than "avoided" costs. Congress' use of the word "will" rather than "could" in 47 U.S.C. y 252(d)(3) establishes that

rather than "could" in 47 U.S.C. y 252(d)(3) establishes that wholesale rates must be set based on the ILEC's avoided, not "avoidable," cost.

-Third, MCI's methodology calculates the avoided cost discount rate using the denominator of GTE's total expenses, rather than its revenues. GTE states that there is inconsistency between MCI's avoided cost methodology and the assumptions used in the Hatfield model. In calculating the amount of joint and common costs that should be added to GTE's TELRICS, the Hatfield Model looks to a calculation by which overhead costs are divided by the amount of its revenues -- and not expenses. GTE states that this results in a lower joint and common allocator. GTE goes on to state that in determining its avoided cost discount, MCI divides total avoided costs by total expenses -- and not revenues, resulting in a higher discount factor.

- Fourth, MCI relies exclusively on ARMIS account data. GTE states that these accounts do not contain any information regarding GTE's work centers and activities, by which any avoided cost factor could be derived.

In short, GTE contends that MCI's avoidable cost study setting forth avoided discount factors does not provide a reliable basis for this Commission's use in setting wholesale rates.

Arbitrator's Decision. The arbitrator adopts MCI's proposal that wholesale rates be set at a 16.63% discount from retail rates.

Discussion. Section 252(d)(3) of the Act establishes the standard for calculating wholesale discount rates:

For the purpose of section 251(c)(4), a State Commission shall determine wholesale rates on the basis of retail rates charged to the subscribers for telecommunication services requested, including the portion thereof attributable to any marketing, billing, collection and other costs that will be avoided by the local exchange carrier.

The FCC Order states, "Resale will be an important entry strategy both in the short term for many new entrants as they build out their own facilities and for small businesses that cannot afford to compete in the local exchange market by purchasing unbundled elements or by building their own networks." FCC Interconnection Order, y 32. MCI has stated that it intends to engage in resale as part of its overall entry

strategy. The setting of a reasonable wholesale rate is important because MCI's costs will include not only what MCI must pay GTE for the service it purchases, but also the costs that MCI will incur in retailing the service, such as marketing, billing, and customer service expenses. MCI will incur retail costs avoided by GTE.

The Telecommunications Act is designed to facilitate economically efficient entry of new competitors into the local exchange market. Thus, the relevant inquiry for determining an appropriate wholesale discount rate is to determine which retail costs are avoidable by an economically efficient competitor selling at wholesale, and not which costs GTE will actually avoid. While specific pricing rules contained in the FCC Order have been stayed, much of the analysis performed by the FCC remains relevant. The FCC Order states criteria for cost studies:

[W]e reject the argument of incumbent LECs and others who maintain that the LEC must actually experience a reduction in its operating expenses for a cost to be considered "avoided" for purposes of section 252(d)(3). We do not believe that Congress intended to allow incumbent LECs to sustain artificially high wholesale prices by declining to reduce their expenditures to the degree that certain costs are readily avoidable. FCC Interconnection Order, § 911.

GTE's calculation of a wholesale discount rate based upon "avoided" costs instead of readily "avoidable" costs is inaccurate.

The purpose of an avoided cost study is to place the retail cost factor into a relationship with the total cost factor (The terms cost and expense are interchangeable). The MCI model accomplishes this. The use of total revenues as the denominator in calculating the avoided cost discount rate as proposed by GTE would inaccurately result in a lower discount factor. GTE's argument that the Hatfield Model is flawed is discussed elsewhere in this Report.

The FCC neither prohibits nor requires use of a single, uniform discount rate for all of an incumbent LEC's services. FCC Interconnection Order, y 916. The FCC Order recognizes that a uniform rate is simple to apply, and avoids the need to allocate avoided costs among services. A uniform discount rate is appropriate on an interim basis in the State of Washington.

ISSUE NO. 9: Avoided Costs - Advertising Expenses

Statement of Issue. Are advertising expenses in their entirety an avoided cost?

Arbitrator's Decision. Issue No. 9 is most pursuant to the arbitrator's decision in Issue No. 8.

ISSUE NOS. 10, 11: Avoided Costs - Operator Services and Directory Assistance

Statement of Issues. Are Call Completion Costs (Operator Services) and number service costs (Directory Assistance) in their entirety an avoided cost?

Arbitrator's Decision. Issue Nos. 10 and 11 are moot pursuant to the

Arbitrator's Decision. Issue Nos. 10 and 11 are most pursuant to the arbitrator's decision in Issue No. 8.

ISSUE NO. 12: Avoided Costs - General and Administrative Expenses

Statement of Issue. Are General and Administrative costs an avoided cost when GTE is wholesaling a local service?

Arbitrator's Decision. Issue No. 12 is most pursuant to the arbitrator's decision in Issue No. 8.

ISSUE NO. 13: Avoided Costs - Product Management Expenses

Statement of Issue. Are Product Management costs in their entirety an avoided cost?

Arbitrator's Decision. Issue No. 13 is most pursuant to the arbitrator's decision in Issue No. 8.

ISSUE NO. 14: Avoided Costs - Testing and Plant Administration Expenses

Statement of Issue. What percentage of Testing and Plant Administration costs are an avoided cost?

Arbitrator's Decision. Issue No. 9 is moot pursuant to the arbitrator's decision in Issue No. 8.

ISSUE NO. 15: Avoided Costs - Sales Expenses

Statement of Issue. What percentage of sales expenses is an avoided cost?

Arbitrator's Decision. Issue No. 9 is most pursuant to the arbitrator's decision in Issue No. 8.

ISSUE NO. 16: Avoided Costs - Uncollectible Expenses

Statement of Issue. What percentage of uncollectible expenses is an avoided cost?

Arbitrator's Decision. Issue No. 9 is most pursuant to the arbitrator's decision in Issue No. 8.

ISSUE NO. 17: Avoided Costs - New Expenses

Statement of Issue. Does the Act's methodology for determining wholesale rates recognize any new costs that might be caused by the requirement to offer services for resale?

GTE Position. The Act allows for recovery of all costs associated with providing wholesale service. GTE's methodology recognizes the carrier line of business as a substitute for recurring wholesale costs as this line of business supports GTE's current wholesale service market. However, GTE has not accounted for any system modification expense or any one-time expense that it may incur in offering services for resale.

MCI Position. MCI states that the FCC's Order indicates, even if such costs are to be recognized, they are adequately reflected in the default discount rate. MCI's avoided cost methodology accounts for some such costs by using only 90% of various ARMIS system accounts as avoidable.

Arbitrator's Decision. GTE will incur new costs in conducting the wholesale operation; however, the carrier line of business is not a sufficiently accurate measure of what those costs will be. There is insufficient evidence in the record to determine what wholesale costs will be incurred by GTE. In addition, the MCI position on resale discount assumes that ten percent (10%) of certain sales costs will be wholesale costs incurred by GTE.

ISSUE NO. 18: Avoided Costs - Volume Discounts

Statement of Issue. Is a volume discount appropriate in a resale environment, and if so, what should the discount be?

GTE Position. No discounts should be given for volume commitments as GTE's avoided costs are calculated on a transaction basis and do not increase as volume increases.

MCI Position. An additional volume discount should be applied to any services purchased under the Agreement. The Volume Discount should be based on total revenues generated by MCI for all services covered by the Agreement across all regions served by GTE.

Arbitrator's Decision. An additional volume discount should be applied to any services purchased under the Agreement. MCI will receive either the volume discounted rate or 16.63% percent (off the original retail rate), whichever is the larger discount.

Discussion. Typically, volume discounts are achieved by network efficiencies, such as serving a large customer by building dedicated facilities rather than using switched facilities. (DiTirro Tr. at 357). To the extent that volume customers are less expensive to serve, the lower cost should be reflected in the adjustments.

Section 251(c)(4)(A) does not contain any exemptions or exceptions to the requirement that "any telecommunications service" must be offered for resale if it is offered at retail to end-users. Section 251(c)(4)(B) expressly precludes a LEC prohibition on resale of such services, and only permits restrictions or limitations which are reasonable and non-discriminatory. The Act's language, therefore, does not support GTE's position. As a practical matter, creating such an exemption would permit incumbent LECs to avoid the resale requirement altogether by switching all customers to some form of discounted or promotional service plan.

The FCC order is clear on volume discounted services. The FCC order states:

We find unconvincing the arguments that the offerings under section 251(c)(4) should not apply to volume-based discounts. The 1996 Act on its face does not exclude such offerings from the wholesale obligation. If a service is sold to end-users it is a retail service, even if it is priced as a volume-based discount off the price of another retail service. The avoidable costs for a service with volume-based discounts, however, may be different than without volume discounts.

FCC Interconnection Order, y 951. The FCC rules on resale restrictions do not incorporate an exemption for volume discounts. 47 CFR y 51.613. This provision is not subject to the Eighth Circuit stay. The FCC does go on to note that, while there may be reasonable restrictions on promotions and discounts, FCC Interconnection Order y 952, restrictions on resale of volume discounts will "frequently produce anticompetitive results [and] should be considered presumptively unreasonable." Id., y 953.

The FCC order also notes, however, that in calculating the proper wholesale rate, incumbent LECs may prove that their avoided costs differ when selling large volumes. In this arbitration, GTE argues that its avoided costs are calculated on a transaction basis and do not increase as volumes increase. GTE Post-Hearing Brief, p. 101. While this is not a basis for excluding volume discounts entirely from the resale requirement, it can be taken into account in establishing the proper wholesale rate. In this case, there is evidence in the record that GTE avoids retail costs when selling at volume. The record does not enable the arbitrator to determine, however, the extent of avoided costs which remain in volume services after GTE applies a discount.

As noted above, the arbitrator does not adopt the GTE wholesale discounts based on its avoided cost study. The Commission has referred resale pricing to a generic proceeding. Any resale rate adopted in this proceeding, therefore, will be an interim rate. In order to arrive at a rate for volume discounted services on an interim basis, therefore, the arbitrator will treat the volume discount as a reasonable approximation of the costs avoided by the volume sale.

ISSUE NO. 19: Services Subject to Resale

Statement of Issue. What GTE services should be required to be made available for resale at wholesale rates?

GTE Position. GTE will make available retail services on a wholesale basis except for below-cost services, promotional services, non-recurring charges, ICB services, access services, operator services, and directory assistance services where no discount applies.

GTE will offer the following services for resale at discounted rates: grand-fathered services; optional dis

MCI Position. GTE services for resale should include all services offered at retail to end users, including promotional, current and future AIN services, wire and voice mail services, enhanced, grandfathered, packaged, individual customer based, contracted and sunsetted services.

GTE should provide necessary maintenance and business process support as well as those technical and systems interfaces required to enable MCI to provide at least the same level and quality of service for all services for resale, functions, features, capabilities and unbundled elements or combinations of unbundled elements.

Arbitrator's Decision. The arbitrator adopts the MCI position, except as to inside wire services. The provision of process support and service quality standards are addressed in other issues.

Discussion. GTE has the duty to "offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers[.]" 47 USC \$\forall 251(c)(4)(A)\$. The Act defines telecommunications as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent or received." 47 USC \$\forall 3(48)\$. The term "telecommunications service" means the offering of telecommunications for a fee directly to the public...regardless of the facilities used." 47 USC \$\forall 3(51)\$.

Section 251(c)(4)(A) of the Act does not contain any exception to support excluding residential service from the resale requirement. GTE must apply the wholesale discount to residential service. GTE's argument that residential service is below-cost has not been accepted by this Commission. Neither the Act nor the FCC order support the GTE position.

The Act contains no exception for deregulated or non-tariffed services.

They must be offered for resale unless they are not "telecommunications services."

Inside wire is not a "transmission" service and need not be made available for resale.

Voice messaging presents a difficult issue. The Commission has not stated whether voice mail constitutes a telecommunications service. However, both the federal and Washington definitions of telecommunications refer to transmission of information. It is difficult to envision voice mail as a viable service without its related information transmission functions, which enable both the storage and retrieval of messages. If voice mail is not itself a telecommunications service, it has telecommunications services

voice mail is not itself a telecommunications service, it has telecommunications services bundled with it. Voice mail functions are part of the switch "fabric." For purposes of the resale requirements in this arbitration, voice mail is considered to be a telecommunications service.

The FCC concludes that promotional offerings are not exempt from the resale provisions of the Act. FCC Interconnection Order, y 948. However, the FCC also adopts a presumption that promotional prices offered for a period of 90 days or less need not be offered at a discount to resellers. FCC Interconnection Order, y 949, 950.

ISSUE NO. 20: Services to the Disabled

Statement of Issue. Is GTE required to offer for resale at wholesale rates services to the disabled, including special features of that service such as free directory assistance service calls, if provided by GTE?

GTE Position. Mandated social programs that provide for discounts of special rates are the responsibility of the CLEC (the retail provider of service). Further, it is the responsibility of each CLEC to verify and document their own customer's status.

MCI Position. GTE should make all of its telecommunications services available for resale to MCI on terms and conditions that are reasonable and non-discriminatory. Where GTE provides related services for the disabled, it should also provide those services to MCI in order for it to comply with the nondiscrimination provisions of the Act.

Arbitrator's Decision. MCI must determine whether its customers qualify for social programs and bear the cost.

Discussion. To the extent that social programs reduce the amount of charges that qualifying consumers pay, they involve a reduction from the retail rate which the CLEC recovers from an internal or external source. Accordingly, the social program rate is not a retail rate.

ISSUE NO. 21: Resale Restrictions

Statement of Issue. What resale restrictions should be permitted, if any?

GTE Position. MCI should be prohibited from "cross class" selling, i.e. MCI may only resell services to that class of customer obtaining identical services from GTE. Additionally, MCI should be prohibited from reselling to interexchange carriers and other telecommunications service providers.

MCI Position. GTE should impose no restrictions on MCI's resale of services except for those specifically sanctioned by the FCC (i.e. lifeline services and residential to business).

Arbitrator's Decision. GTE should impose no restrictions on MCI's